

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/003319

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B26F1/28

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B81B B26F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search {name of data base and, where practical, search terms used)

EPO- Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No
A	US 4 777 338 A (CROSS ET AL) 11 October 1988 (1988-10-11) column 3, line 38 - column 3, line 49; figures -----	1-67
A	US 6 348 675 B1 (TAKAGI KAZUNARI) 19 February 2002 (2002-02-19) the whole document -----	1-67
X		51
A	GB 1 089 369 A (MEYER LABORATORIES., INC) 1 November 1967 (1967-11-01) page 5, line 118 - page 5, line 124 page 10, line 38 - page 10, line 55 ----- -/-	1-67

 Further documents are listed in the continuation of box C Patent family members are listed in annex

° Special categories of cited documents

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the international filing date
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the International filing date but later than the priority date claimed

- T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- X' document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- Y' document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- & document member of the same patent family

Date of the actual completion of the international search

17 June 2005

Date of mailing of the international search report

13.10.2005

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/003319

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	"ELEKROSTATISCHE MIKROPEFFORATION: ENERGIEENSPARUNG UND LEISTUNGSVERBESSERUNG" PAPIER + KUNSTSTOFF VERARBEITER, DEUTSCHE FACHVERLAG. FRANKFURT ₅ DE ₅ vol. 33, no. 3, March 1998 (1998-03), page 46, XP000741768 ISSN: 0048-2897 -----	1-67
A	GB 1 095 269 A (INSTITUT DE RECHERCHES DE LA SIDERURGIE FRANCAISE) 20 December 1967 (1967-12-20) page 2, line 21 - line 73; figures -----	1-67
A	GB 1 165 458 A (POLYPLASTE, H.ROLF SPRANGER K.G.) 1 October 1969 (1969-10-01) the whole document -----	1-67
A	WO 99/31503 A (VOGEL, HORST; SCHMIDT, CHRISTIAN) 24 June 1999 (1999-06-24) cited in the application abstract -----	1-67

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Box II Observations where certain claims were found unsearchable (Continuation o f item 2 o f first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

1 Claims Nos because they relate to subject matter not required to be searched by this Authority, namely

2 Claims Nos because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically

3 Claims Nos because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

Box III Observations where unity o f invention is lacking (Continuation o f item 3 o f first sheet)

This International Searching Authority found multiple inventions in this international application as follows

see additional sheet

1 As all required additional search fees were timely paid by the applicant this International Search Report covers all searchable claims

2 As all searchable claims could be searched without effort justifying an additional fee this Authority did not invite payment of any additional fee

3 As only some of the required additional search fees were timely paid by the applicant this International Search Report covers only those claims from which fees were paid, specifically claims Nos

4 No required additional search fees were timely paid by the applicant Consequently, this International Search Report is restricted to the invention first mentioned in the claims it is covered by claims Nos

1-67

Remark on Protest

The additional search fees were accompanied by the applicant's protest

No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-67

Methods and devices for spark perforating an electrically insulating substrate, solving manufacturing problems.

2. claims: 68-73

Electrically insulating substrates having a structure or array of structures as produced by spark perforation and use of the same. These solve several application problems.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/003319

Patent document cited in search report		Publication date	Patent family member(s)			Publication date
US 4777338	A	11-10-1988	MONE			
US 6348675	Bl	19-02-2002	AU	755497	B2	12-12-2002
			AU	8638698	A	01-03-1999
			CA	2301668	A1	18-02-1999
			CN	1207340	A	10-02-1999
			DE	69804806	D1	16-05-2002
			DE	69804806	T2	14-11-2002
			EP	1001869	A1	24-05-2000
			WO	9907530	A1	18-02-1999
			J P	11048198	A	23-02-1999
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GB 1096269	A	20-12-1967	AT	266488	B	25-11-1968
			BE	666899	A	03-11-1965
			DE	1300994	B	14-08-1969
			FR	1418083	A	19-11-1965
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WO 9931503	A	24-06-1999	AT	205300	T	15-09-2001
			AU	746580	B2	02-05-2002
			AU	8237998	A	05-07-1999
			CA	2316966	A1	24-06-1999
			DE	59801410	D1	11-10-2001
			DK	1040349	T3	28-01-2002
			EP	1040349	A1	04-10-2000
			ES	2163284	T3	16-01-2002
			HK	1028450	A1	15-03-2002
			J P	3486171	B2	13-01-2004
			J P	2002508516	T	19-03-2002
			US	6758961	Bl	06-07-2004